JVC

SERVICE MANUAL

MODEL
JA-S8
STEREO INTEGRATED AMPLIFIER

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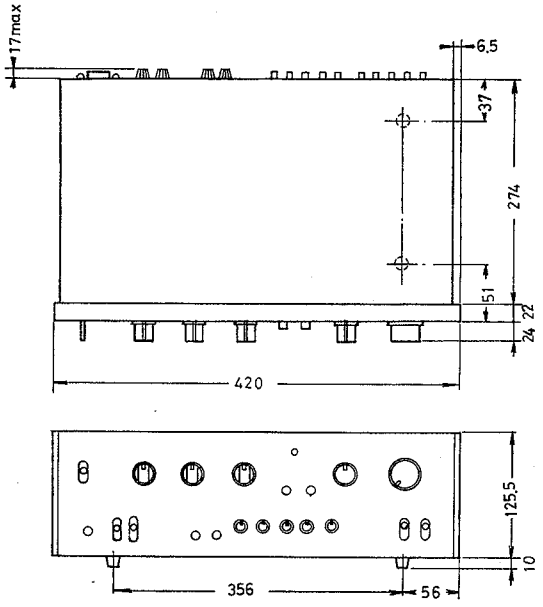
SPECIFICATIONS

DIMENSIONS:

Height:	5-7/16	inch (13.5cm)
Width:	16-1/2	inch (42.0cm)
Depth:	13-1/8	inch (33.3cm)

WEIGHT:

Net:	22.1 lbs (10.0kg)
Gross:	25.3 lbs (11.5kg)



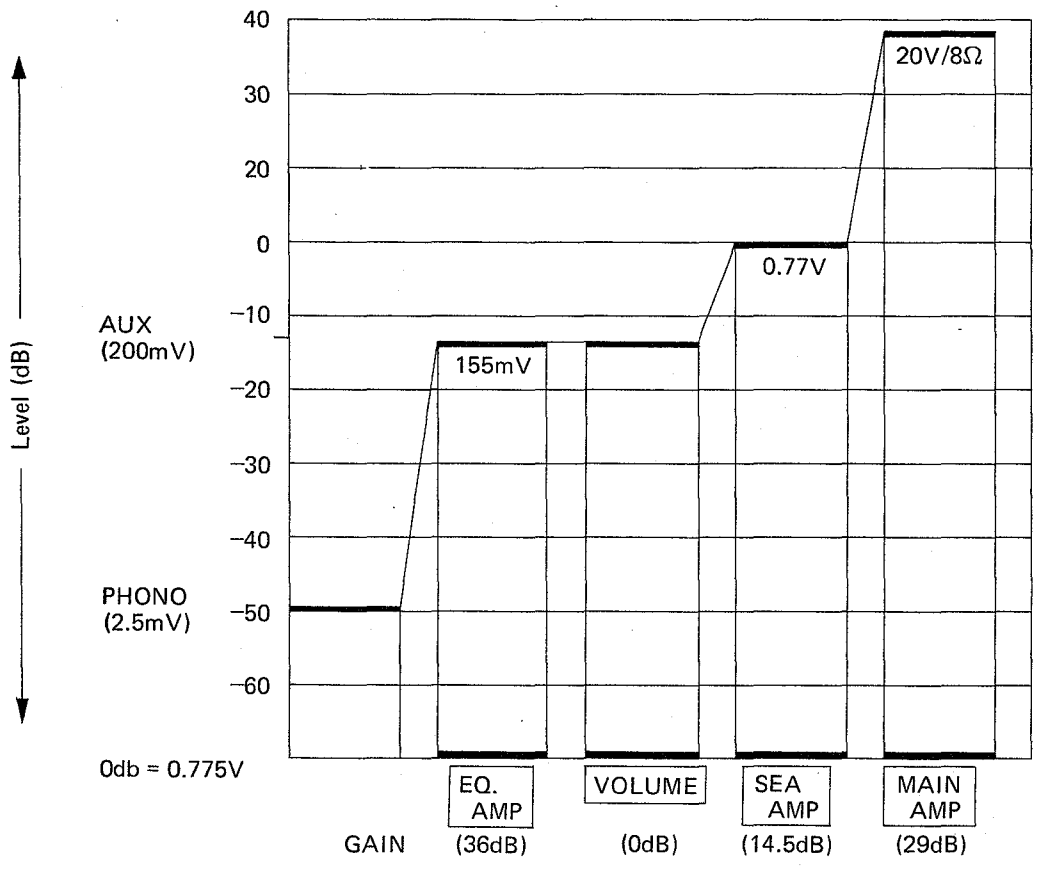
POWER AMPLIFIER SECTION

RMS Continuous Power: All Channel Driven with no more than 0.25% T.H.D. 20Hz ~ 20KHz Power Bandwidth	50W per channel at 8 ohms load 55W per channel at 4 ohms load
RMS Continuous Power: All Channel Driven with no more than 0.25% T.H.D. at 1KHz	55W per channel at 8 ohms load 60W per channel at 4 ohms load
Total Dynamic Power (IHF): All Channel Driven	Total 160W (80W per channel) at 8 ohms Total 210W (105W per channel) at 4 ohms
Power Bandwidth:	10Hz ~ 40KHz (IHF)
Total Harmonic Distortion:	0.3% at rated output 0.05% at half rated output
Intermodulation Distortion:	0.3% at rated output 0.1% at half rated output
Frequency Response:	10Hz ~ 150KHz (–3dB)
Signal to Noise Ratio:	92dB
Damping Factor:	30 at 8 ohms
Load Impedance:	4 ohms ~ 16 ohms (System 1 & 2) 8 ohms ~ 16 ohms (System 1 + 2)

PRE AMPLIFIER SECTION

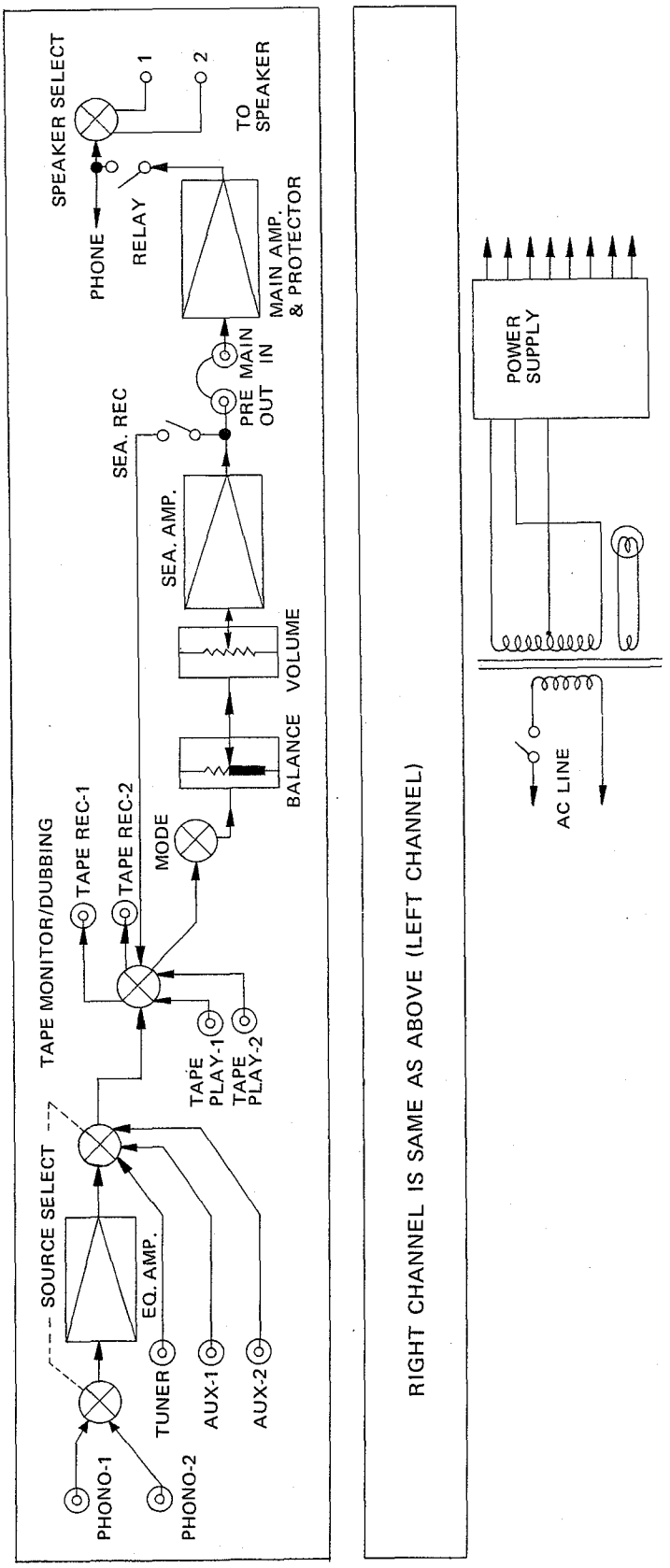
Frequency Response:	10Hz ~ 30KHz (±0.5dB)
Input Sensitivity/Impedance:	Phono 2.5mV/50K ohms Aux 200mV/50K ohms Tape 200mV/50K ohms
Signal to Noise Ratio:	Phono 66dB (RMS) Aux 88dB (RMS)
Phono Equalizer Overload:	200mV (RMS), 560mV (P-P)
Phono Equalizer Deviation:	±0.5dB from RIAA curve
SEA Tone Controls:	40, 250, 1000, 5000 & 15,000Hz
SEA Adjustable Range:	±12dB
High Filter:	6dB/oct at 9KHz
Subsonic (low) Filter:	–6dB/oct at 18Hz
Audio Muting:	–20dB

LEVEL DIAGRAM



MEMO

BLOCK DIAGRAM



FEATURES

1. All-Stage Direct-Coupled Pure Complementary OCL Power Amplifier

The power amplifier in the JVC JA-S8 is the type found usually only in more expensive hi-fi instruments. Its all-stage direct-coupled pure complementary circuitry is the latest in state-of-the-art design and provides very low distortion and high stability with an RMS output of 40W per channel (at 1KHz, both channels driven at 8 ohms). This first-class operation is possible thanks to the application of high negative feedback in vital areas, and means always-reliable performance even when musical signals of the most extreme complexity and subtlety are present.

2. Advanced Phono Equalizer

The phono equalizer in the JA-S8 keeps deviation from the standard RIAA equalizer curve to no more than ±0.5dB, a figure that compares favorably with any top-grade amplifier. Since it accepts phono input signals of up to 250mV (RMS), full dynamic range is assured to faithfully reproduce a wide range of sound intensities—from the faintest pianissimo to an ear-splitting fortissimo. The JA-S8 reproduces all the sounds on the record with proper balance and perfect clarity.

3. Safeguarded Phono Equalizer Eliminates High-Frequency Attenuation

The JA-S8 features a simple but revolutionary design innovation: by placing the phono equalizer section in the rear of the chassis, and connecting the rear-panel PHONO terminals directly to the equalizer by means of sockets, the need for lengthy inter-connections of shielded wire is eliminated. The front-panel control for source selection is connected to the equalizer by a long shaft (see illustration). The danger of having high-frequency signals attenuated or otherwise damaged by electrical resonance is thus greatly reduced. The use of shielded wire is reduced throughout the JA-S8 to about one-third of what ordinary amplifiers usually use, thanks to the application of the same direct-coupling method to tape monitor facilities and the development of a highly functional chassis. This design extends the transparency of high frequencies and also reduces manufacturing costs.

4. JVC's Exclusive S.E.A. Tone-Zone System and S.E.A. Recording

The popular success of the S.E.A. (Sound Effect Amplifier) System developed by JVC (U.S. Patent No. 3566294) has persuaded countless numbers of customers to buy JCV high fidelity products over all the competition. Each of the five tone-zone controls in the S.E.A. in the new JA-S8 has a plus/minus adjustment range of 12dB—a vast improvement over conventional bass/treble tone controls. A further bonus is that this S.E.A. System can be used for recording to either (or both) of the two tape decks which can be connected to the JA-S8. The S.E.A. REC switch on the front panel is provided for this purpose.

5. Jumbo Power Transformer and Capacitors

The power performance of the JA-S8 is enhanced by its heavy (2.9kg), oversized power transformer and two jumbo capacitors (6,800μF each). A re-allocation of the parts and production costs in this new JA Series has allowed JVC to provide this extra assurance that stability is maintained against any pulsive, transient or continuous power abnormality.

6. Self-Restoring Triple Power Protection Circuit

The dual power supply requirements of the OCL power amplifier in the JA-S8 has many advantages, as mentioned above. OCL amplifiers, however, need special power protection to prevent unexpected power surges and other abnormalities from causing damage to the power transistors or the connected speaker systems. The patented protection circuit (U.S. Pat No. 3691427) in the JA-S8 deals with such problems in these three ways:

1) A four-second delay is provided between the time power is switched on and the time that any signal reaches the speaker circuit. (It also provides a 0.1-second delay from power-off to circuit disconnection.) This does away with the "thump-pop-crackle" sounds from speakers and protects the delicate speaker units as well.
2) The circuit detects abnormally low or high voltage at the speaker terminals and acts instantly to break connections when necessary.
3) The power transistors in the amplifier are protected from damage due to accidental short-circuits in speaker leads or when an excessively low speaker impedance is applied.

The power protection circuit in the JA-S8 restores itself automatically once the abnormality is corrected, thus eliminating need to replace fuses.

7. 4-Gang Volume Control for 4-Channel Adaptability

As an extra convenience, the JA-S8 is designed for quick and easy incorporation in an advanced 4-channel system. The volume control is provided with a 4-gang potentiometer so that it can be used as a 4-channel master control when inter-connected with another stereo amplifier. Input and output terminals are provided on the rear panel of the JA-S8 for such use. Loudness and muting controls are also designed to work in the 4-channel mode.

8. Dual Tape Monitor Circuits and Tape-to-Tape Dubbing

The 6-position Tape Monitor switch on the front panel of the JA-S8 is easy to operate and provides a wide range of uses. Up to two separate stereo tape decks can be connected through rear-panel terminals and can be separately monitored for playback. Further, any source signal can be recorded into either deck individually, or into both simultaneously. And for extra convenience, the Tape Monitor switch provides two positions for deck-to-deck tape dubbing: Tape 1 to 2 or Tape 2 to 1. (When dubbing from Deck 1 to 2, either deck may be monitored, providing it is the three-head type.) The S.E.A. REC facility mentioned above, and the fact that any of the three separate stereo AUX circuits can be used for third-deck playback, extend the tape versatility of the JA-S8.

9. Twin Pre-Out Terminals

Two separate sets of stereo terminals are provided on the rear panel of the JA-S8 for deriving output signals from the preamplifier section. These PRE-OUT taps mean that an additional power amplifier, a separate VU monitor unit or other such instruments can be employed.

HOW TO CHECK THE CENTER VOLTAGE AND THE IDLING CURRENT OF POWER AMPLIFIER

NOTE: Allow the set to warm up at least for 10 minutes before you begin the following procedure.

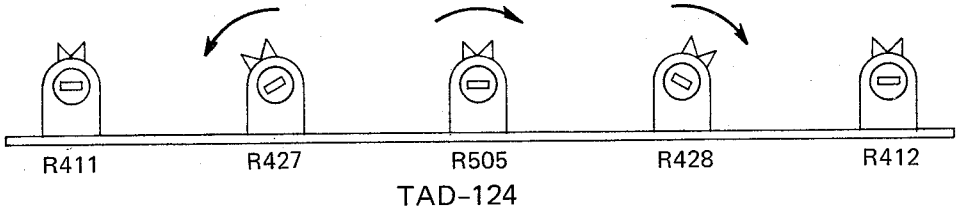
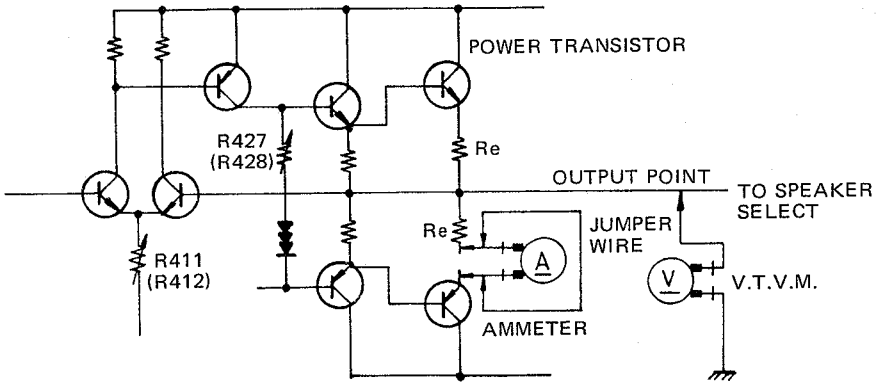


Fig. 3



Connect of a measurement instrument as shown Fig. 4. This circuit is the standard one of main amplifier.

- Turn VOLUME control to minimum

  (1) Connect the probe of VTVM (D.C.) to a positive pole of output point. And connect the ground lead of VTVM (D.C.) to a chassis.

  (2) Insert an ammeter and a jumper wire together shown Fig. 4.

  NOTE: After the power switch has been turned on and jumper wire has been take off, adjust the idling current in order to protect the ammeter against being damaged by surge current.

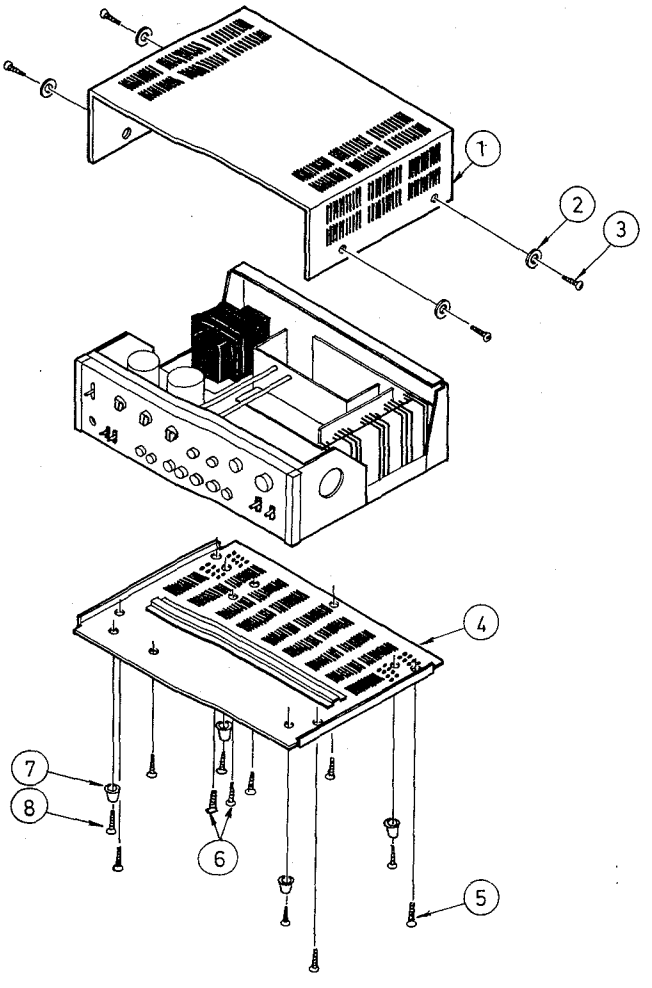
- Turn POWER SWITCH on

  (1) VTVM (D.C.) ought to show zero V. If VTVM (D.C.) is not zero V adjust R411 (412) to VTVM (D.C.) reading of zero V.

  (2) An ammeter ought to show 10mA ~ 20mA. If an ammeter reading of volume are not 10mA ~ 20mA, adjust R427 (R428) to an ammeter reading of 10mA ~ 20mA.

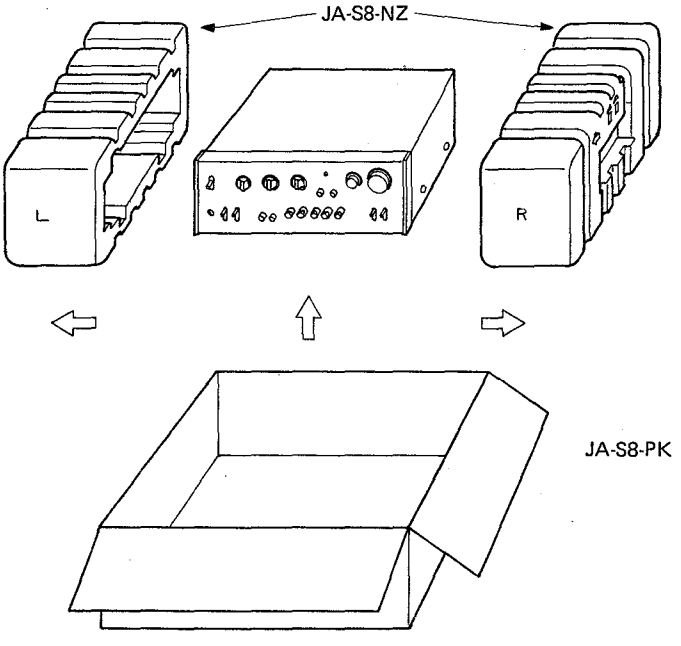
  NOTE: The adjustment of the center voltage of power amplifier should be performed before measuring the idling current.

FINAL PACKING ASS'Y



Ref. No.	Parts No.	Parts Name
	JA-S8-PK	Packing Materials
	JA-S8-NZ	Carton Case
	E33433-001	Envelope (Vinyl Dust Cover)

REMOVEL OF THE TOP COVER AND BOTTOM PLATE

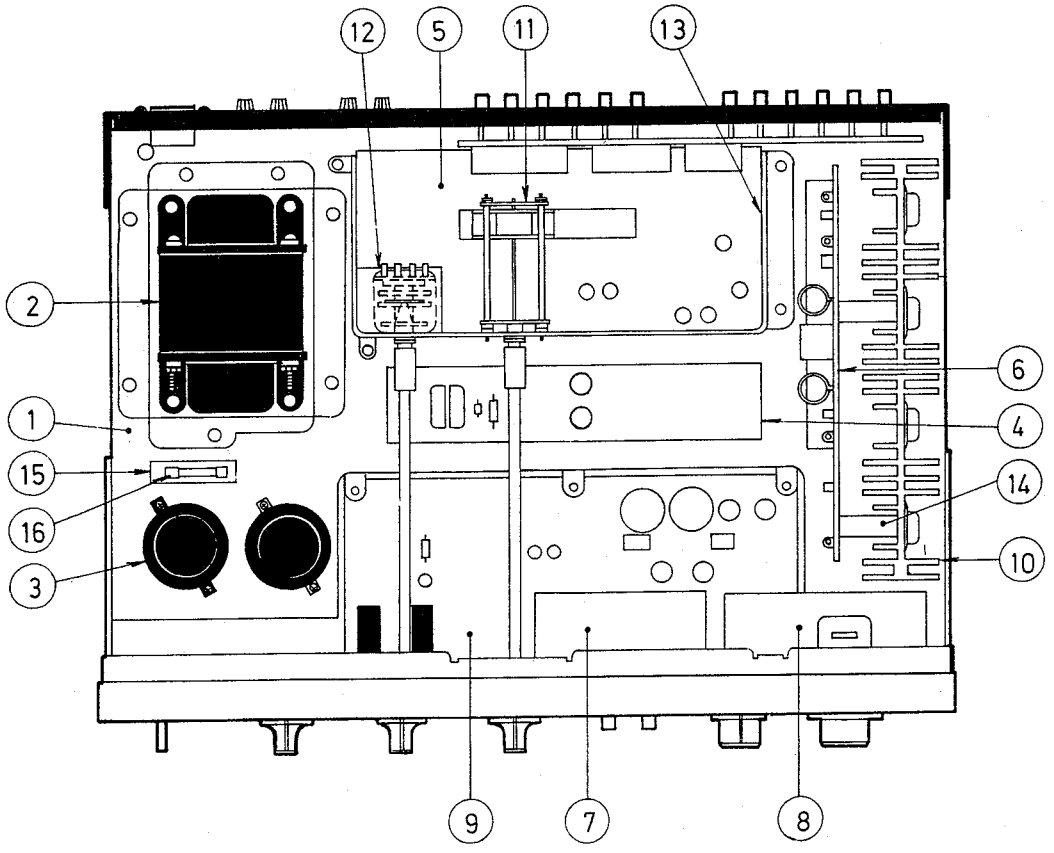


Ref. No.	Parts. No.	Parts. Name
1	E21158-003	Cover
2	Q03093-108	Washer
3	SDSP4008RS	Screw
4	E20889-003	Bottom Plate
5	SBSB3008N	Tapping Screw
6	SBSB4008N	Tapping Screw
7	QZF1514-001UA	Foot
8	SBSB3012N	Tapping Screw

MAIN PARTS LOCATION (TOP VIEW)

Ref. No.	Parts No.	Parts Name	Description
1	E1738-003	Chassis Base	
2	E03077-17	Power Transformer	
3	QEY5007-121	Electrolytic Capacitor	50V 10000μF
4	TPS-7B	Power Supply Circuit Board	
5	TAE-104C	Equalizer Circuit Board	
6	TAD-159B	Power Drive Circuit Board	
7	TAC-293B	Filter Circuit Board	Combined when manufacturing as TXX-2B (Ref. to P. 13)
8	TAC-294	V.R. Circuit Board	
9	TAC-365	S.E.A. Circuit Board	
10	E32818-003	Heat Sink	
11	QSR5545-200	Slide Rotary Switch	Mounted on TAE-104C
12	QSR0055-001	Rotary Switch	
13	E33426-001	Switch Bracket	Mounted on TAE-104C
14	E48555-002	Circuit Board Bracket	
15	QMG1121-004	Fuse Board	UL
16	QMF61U1-4RO	Fuse	4.0A (UL)
17			

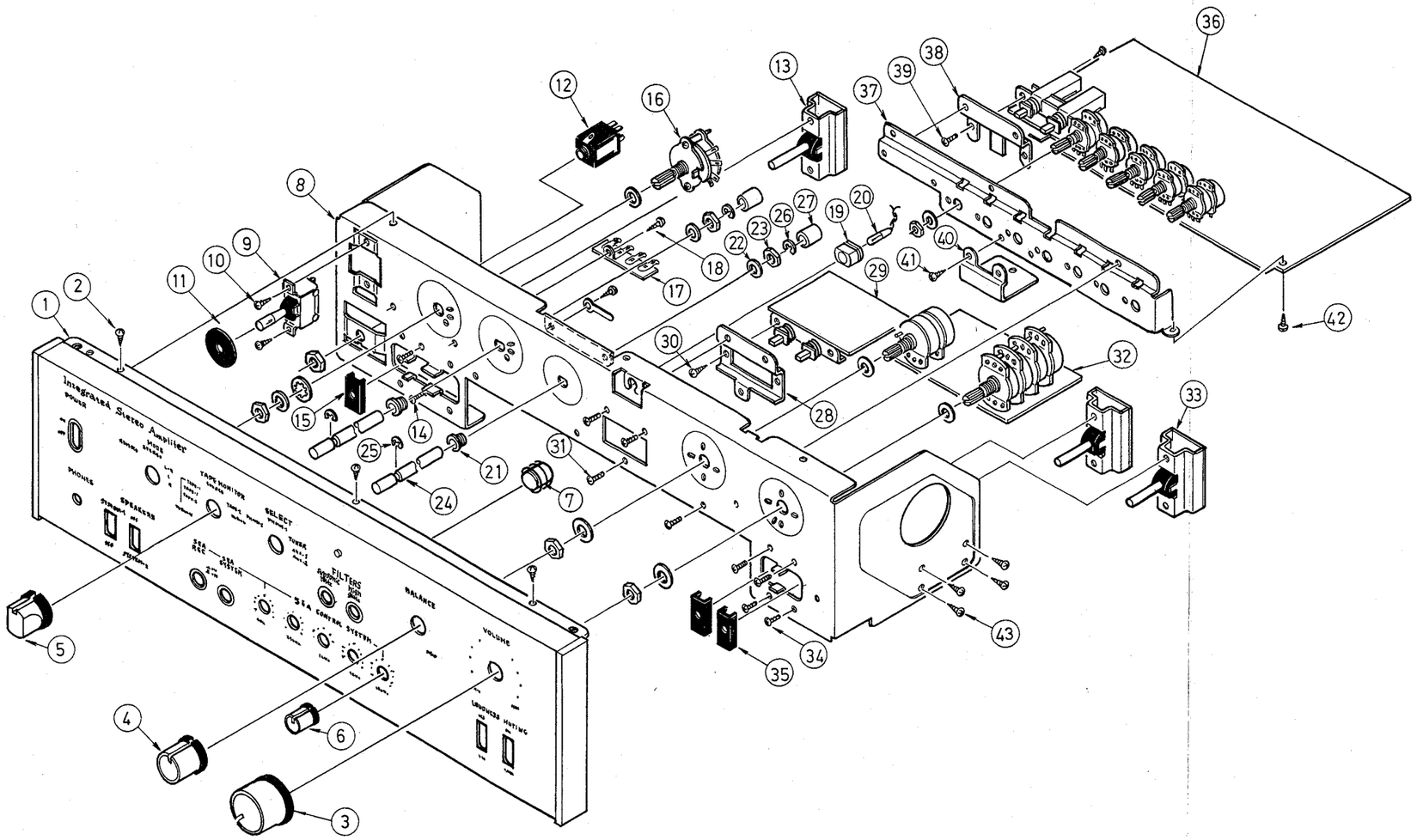
Top View



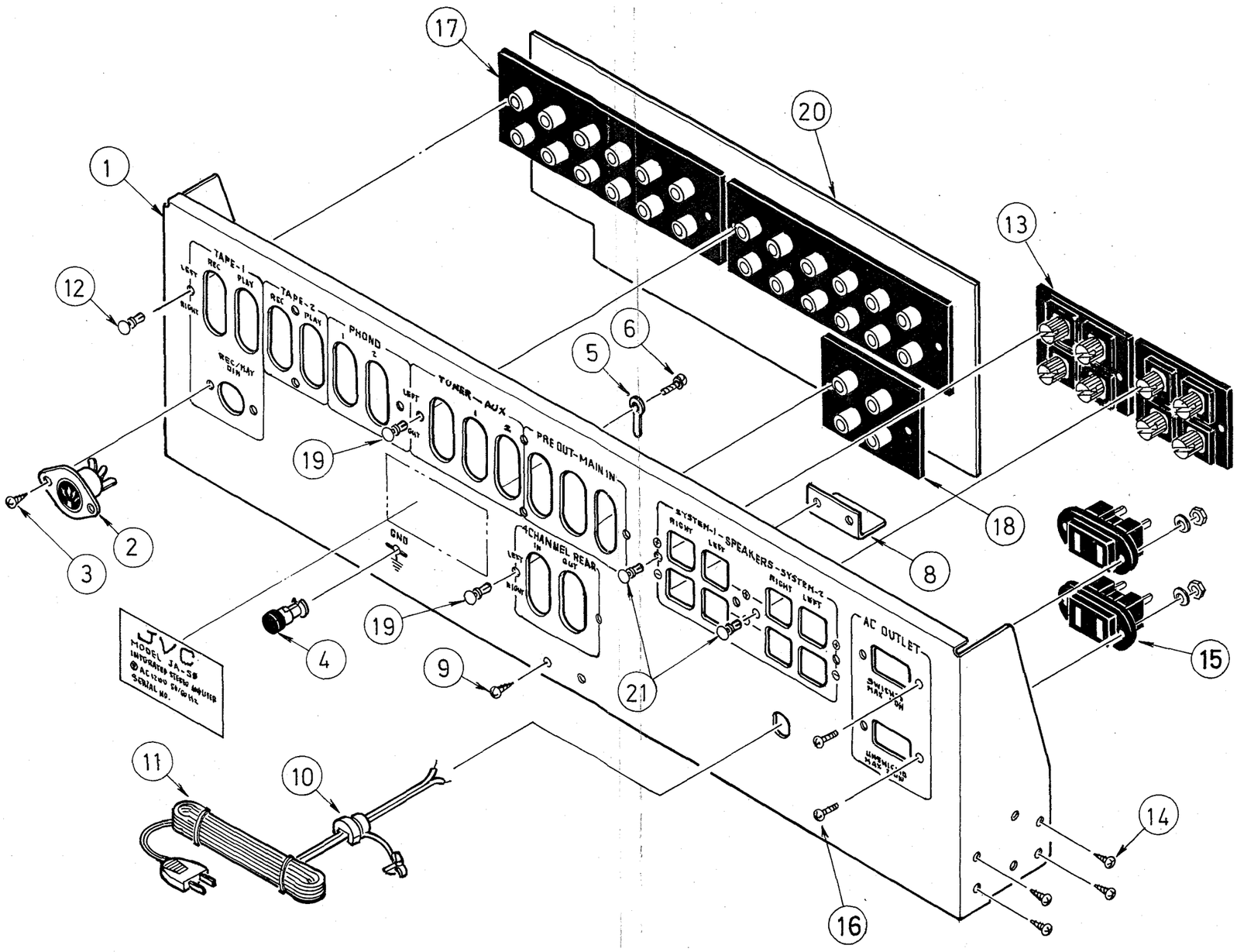
LIST OF FRONT PANEL PARTS FOR REPLACEMENT

Ref. No.	Parts No.	Parts Name	Description
1	E21628-002	Front Panel Ass'y	
2	SBSB3008C	Tapping Screw	To Fix a Front Panel Ass'y
3	E49506-001	Knob	For Volume
4	E49507-001	Knob	For Balance
5	E49508-001	Select Knob	For Select, Tape, Mode
6	E49509-001	Knob	For S.E.A.
7	E49505-001	Push Button Knob	
8	E1665-006	Front Bracket	
9	QSU1222-001	Lever Switch	Power Switch TV-5
10	SSSB3008N	Tapping Screw	
11	E45979-012	Spacer	
12	QMS6301-001	Headphone Jack Ass'y	
13	QSL2235-008	Lever Switch	Speaker Select
14	SSSP3006NS	Ass'y Screw	
15	E45979-007	Spacer	
16	QSR0017-001	Rotary Switch	Mode
17	QML1310-043	Lug Strip Ass'y	
18	SBSB3008N	Tapping Screw	
19	E46029-001	Rubber Bushing	
20	QLP3104-101	Mini Lamp	6V 35mA UL
21	E46880-002	Bushing	
22	Q03091-141	Washer	
23	E5357-2	Nut	
24	E47060-007	Shaft	
25	REE4000	"E" Ring	
26	REE4000	"E" Ring	
27	E47061-002	Connector	
28	E47610-003	Push Switch Bracket	
29	TAC-293B	Filter Circuit Board	Combined with TAC-294
30	SPSP3008NS	Ass'y Screw	
31	SSSB3008N	Ass'y Screw	
32	TAC-294	VR Circuit Board	Combined with TAC-293B
33	QSL4235-032	Lever Switch	Loudness, Muting
34	SSSP3006NS	Ass'y Screw	
35	E45979-007	Spacer	
36	TAC-365	S.E.A. Circuit Board	
37	E33085-003	S.E.A. C. Board Bracket	
38	E49511-001	Push SW. Bracket	
39	SPSP3008N	Screw	
40	E47804-002	Bracket	
41	SBSB3008N	Tapping Screw	
42	SBSB3006N	Tapping Screw	
43	SBSB3008N	Tapping Screw	

EXPLODED VIEW OF MECHANICAL PARTS (FRONT PANEL)



EXPLODED VIEW OF MECHANICAL PARTS (REAR PANEL)



LIST OF REAR PANEL PARTS FOR REPLACEMENT

Ref. No.	Parts No.	Parts Name	Description
1	E21114-008	Rear Panel	
2	QMC0589-001	DIN Socket	
3	SBSB3008N	Tapping Screw	
4	E04069	Push Terminal	Earth
5	52868-3	Lug Terminal	
6	LPSP3005NS	Ass'y Screw	
7			
8	E44336-002	Bracket	To Fix Bottom Plate
9	SBSB3008M	Tapping Screw	
10	E31704-003	Cord Stopper	
11	QMP1200-244	Power Cord	
12	E48729-001	Plastic Rivet	
13	E03572-001	Terminal Ass'y	
14	SBSB3008M	Tapping Screw	
15	QMC0234-001	AC Socket	
16	SPKP3010S	Screw	
17	E03043-122	Pin Jack Ass'y	12 Pin
18	E03043-42	Pin Jack Ass'y	4 Pin
19	E48729-001	Plastic Rivet	
20	TAC-295	Pin Jack C. Board	
21	E48729-001	Plastic Rivet	

TSC-4B FUSE CIRCUIT BOARD ASS'Y

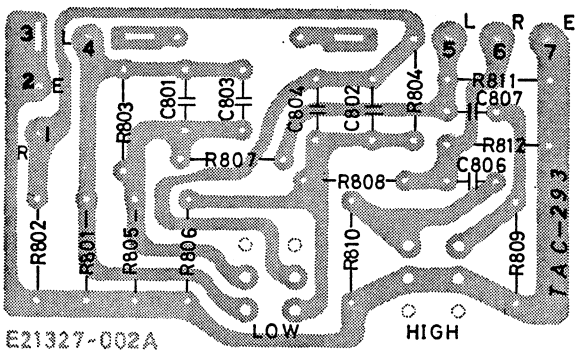
(Mounted on the bottom of the chassis)

Ref. No.	Parts No.	Parts Name	Description
	E34006-002	Circuit Board	
	E45524-001	Contact Clip	

Fuses to Fit in

Ref. No.	Parts No.	Parts Name	Description
	QMF61M2-R20	Fuse	0.2A
	QMF61M2-R10	Fuse	0.1A
	QMF61U1-4R0	Fuse	4.0A

TAC-293B FILTER CIRCUIT BOARD ASS'Y (BOTTOM VIEW) (Combined with TAC-294 as TXX-2B)



Resistors

Ref. No.	Parts No.	Parts Name	Description
R807, R808	QRD141J-	Carbon	

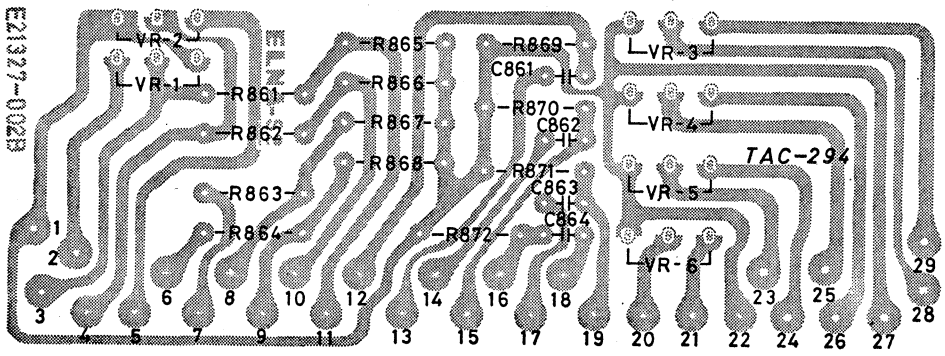
Capacitors

Ref. No.	Parts No.	Parts Name	Description
C801~C806	QFM41HK-	Mylar	

Others

Ref. No	Parts No.	Parts Name	Description
	QSP0220-002	Push Switch	Filter

TAC-294 VOLUME RESISTOR CIRCUIT BOARD ASS'Y (BOTTOM VIEW) (Combined with TAC-293B as TXX-2B)



Resistors

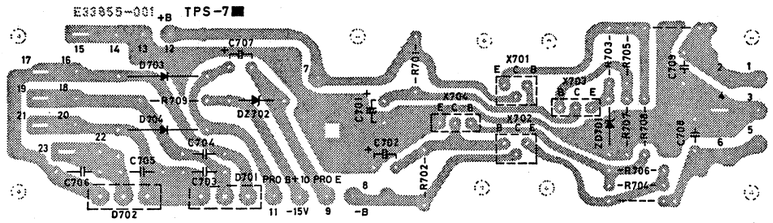
Ref. No.	Parts No.	Parts Name	Description
VR1, VR2	E03454-003	Variable	2-Ganged (Balance)
VR3, VR4, VR5, VR6	QVN4A2B-5F5	Variable	4-Ganged (Volume)
R861~R882	QRD141J-	Carbon	1/4W 5%

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C861~C864	QFM41HK-	Mylar	50V 10%

CAUTION: TXX-2 consists of TAC-293B and TAC-294. Two blocks of circuit are conbined when manufacturing. If you order TAC-293B or TAC-294, write the parts name as TXX-2.

TPS-7 POWER SUPPLY CIRCUIT BOARD ASS'Y



Transistors

Ref. No.	Parts No.	Parts Name	Description	Pc	fT
X701	2SC1061(C)	Silicon	NPN	25W	8MHz
X702	2SA489(Y)	Silicon	PNP	30W	3MHz
X703	2SC711A(E)	Silicon	NPN	200mW	150MHz
X704	2SA628A(E)	Silicon	PNP	150mW	100MHz

Diodes

Ref. No.	Parts No.	Parts Name	Description
D701	ESAC02-03N	Silicon	
D702	ESAC02-03C	Silicon	
D703, D704	SIB01-02	Silicon	
ZD701	E0771-15	Zener	7V
ZD702	E0771-11	Zener	15V

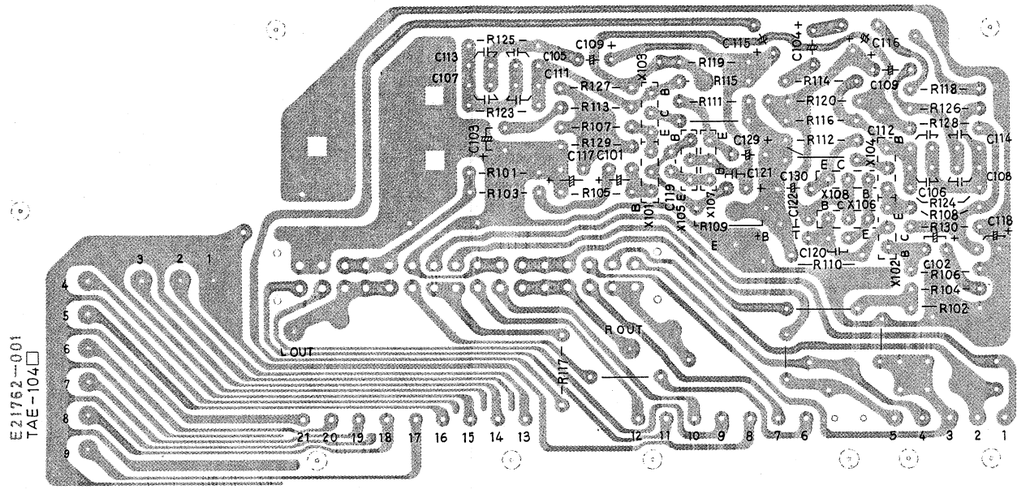
Resistors

Ref. No.	Parts No.	Parts Name	Description
R701, R702	QRD141J-153	Carbon	1/4W
R703, R704	QRD141J-223	Carbon	1/4W
R705	QRD141J-822	Carbon	1/4W
R706	QRD141J-394	Carbon	1/4W
R707	QRD141J-392	Carbon	1/4W
R708	QRD141J-273	Carbon	1/4W
R709	QRC121K-332	Composition	1/2W

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C701, C702	QEW41HA-476	Electrolytic	47μF 50V
C703, C704, C705, C706, C708, C709	QCF12HP-103	Ceramic	0.1μF 500V
C707	QEW41HA-106	Electrolytic	10μF 50V

TAE-104C EQUALIZER CIRCUIT BOARD ASS'Y



Transistors

Ref. No.	Parts No.	Parts Name	Description	Pc	fT
X101~X104	2SC1345(D)	Silicon	(HITACHI)	200mW	230MHz
X105, X106	2SA726(F)	Silicon	(TOSHIBA)	150mW	100MHz

Resistors

Ref. No.	Parts No.	Parts Name	Description
R101~R128	QRZ0019-	Carbon	Low Noise Type

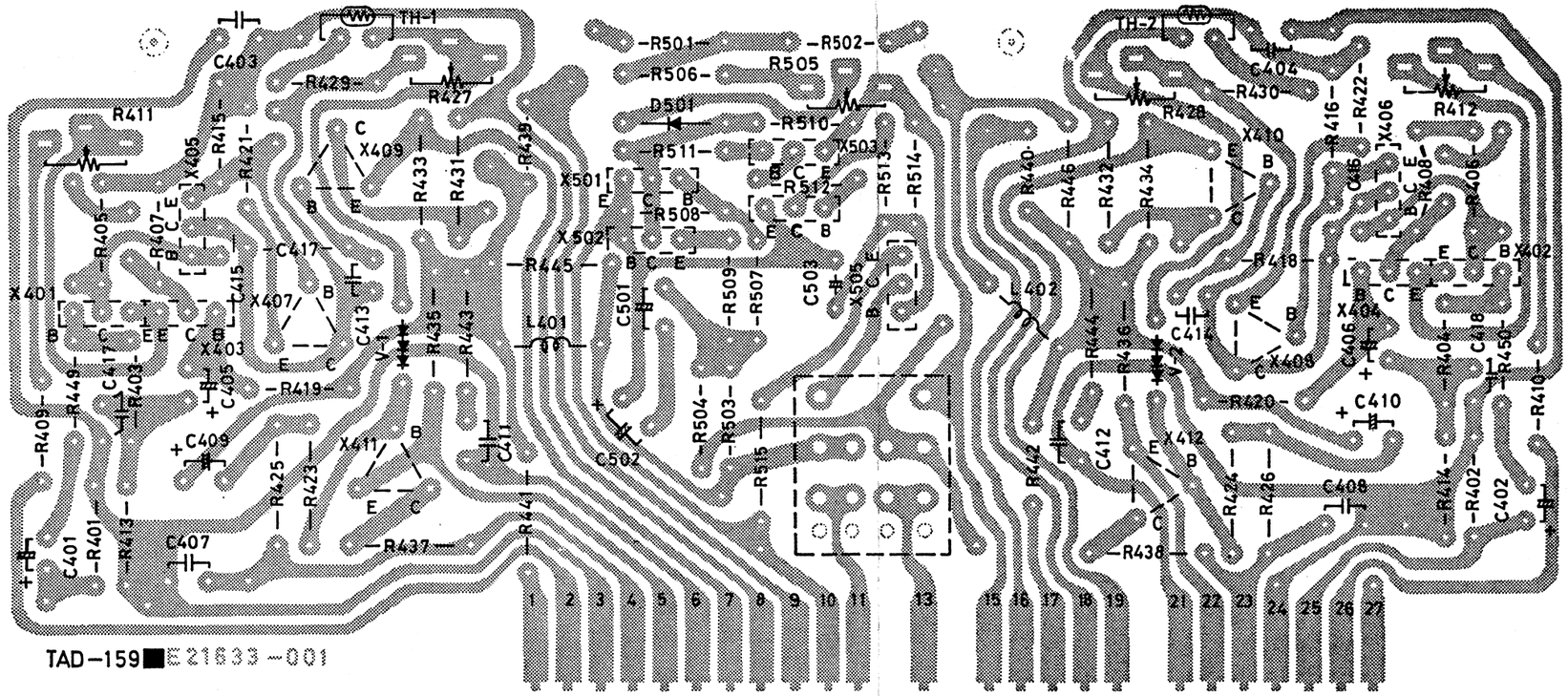
Capacitors

Ref. No.	Parts No.	Parts Name	Description
C101~C104, C109, C110, C115~C118, C129, C130	QEW41EA-	Electrolytic	
C105~C108, C111, C112	QFM41HJ-	Mylar	
C113, C114, C121, C122	QCS11HJ-	Ceramic	

Others

Parts No.	Parts Name	Description	
QSR5545-200	Rotary Switch	Select Switch	4 poles 5 pos.
E03564-9	Pin Plug Ass'y	9 Pin Socket Plug	For interconnection with Rear panel
E03564-7	Pin Plug Ass'y	7 Pin Socket Plug	
E03564-5	Pin Plug Ass'y	5 Pin Socket Plug	

TAD-159B POWER DRIVE CIRCUIT BOARD ASS'Y



TAD-159■E21633-001

Transistors

Ref. No.	Parts No.	Parts Name	Description	Pc	fT
X401~X404	2SC1345(D)V	Silicon	(HITACHI)	20mW	230MHz
X405, X406	2SB527(D) or 2SA872(A)	Silicon	PNP	10W	
X407, X408, X411, X412	2SA607V(M)	Silicon	PNP (N.E.C.)	1W	100MHz
X409, X410	2SC960V(M)	Silicon	NPN (N.E.C.)	1W	100MHz
X501, X502, X504	2SC711A(E)	Silicon	(MITSUBISHI)	200mW	150MHz
X503	2SA628A(E)	Silicon	(MITSUBISHI)	100mW	100MHz
X505	2SC1213A(B)	Silicon	(HITACHI)	400mW	

Diodes

Ref. No.	Parts No.	Description	
D501	1S426GFM	(J.R.C.)	

Capacitors

Ref. No.	Parts No.	Parts Name	Description
C401, C402	QEW41HA-106	Electrolytic	10μF 50V
C403, C404, C407, C408	QFM41HA-224	Mylar	0.22μF 50V
C405, C406	QEW41HA-226	Electrolytic	22μF 50V
C409, C410	QEW41HA-107	Electrolytic	100μF 50V
C411, C412	QFM41HA-473	Mylar	0.047μF 50V
C413, C414	QFM41HA-122	Mylar	0.0012μF 50V
C501, C502	QEW41EA-227	Electrolytic	220μF 16V
C503	QEW41HA-227	Electrolytic	220μF 25V
C415	QCS11HJ-390	Ceramic	39pF 50V

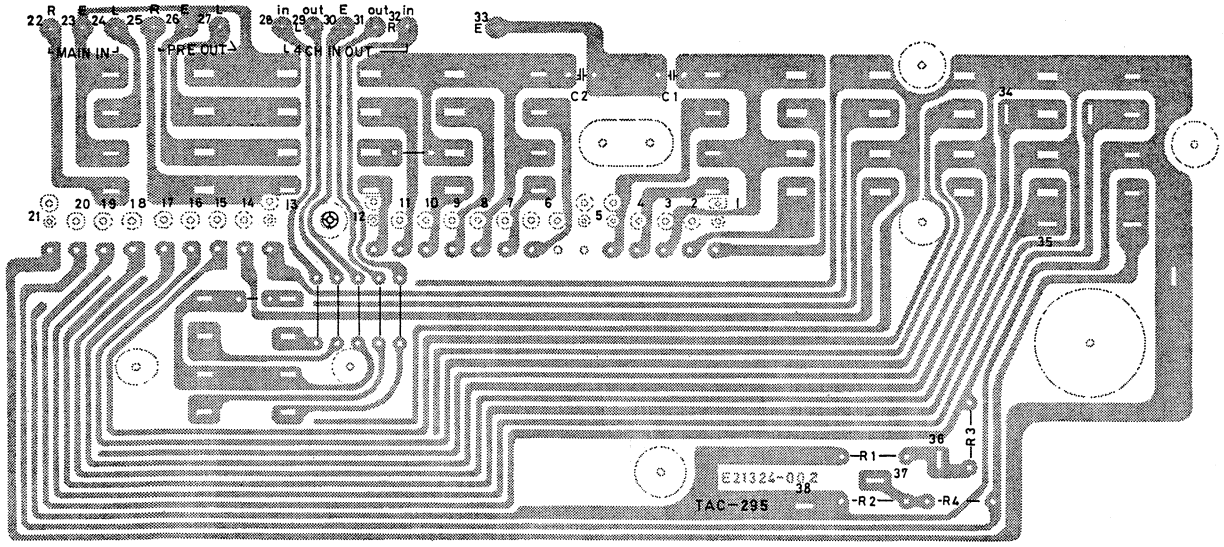
Others

Ref. No.	Parts No.	Parts Name	Description
V-1, V-2	STV-3H	Varistor	(SANKEN)
L401, L402	E04059-2R7	Choke Coil	2.7mH
	MY4-0	Relay	

Resistors

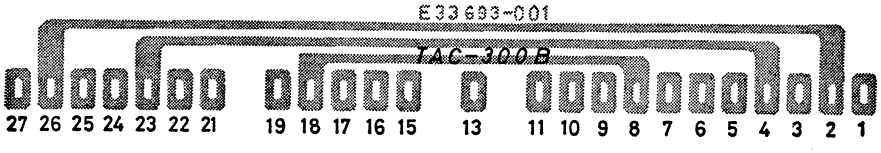
Ref. No.	Parts No.	Parts Name	Description
R427, R428	QVP2A0B-052	Semi Fix V.	500Ω (B)
R411, R412, R205	QVP2A0B-014	Semi Fix V.	10K (B)
R401, R402	QRZ0019-154	Carbon	Low Noise Type 1/4W
R403, R404	QRZ0019-683	Carbon	Low Noise Type 1/4W
R405, R406, R407, R408	QRZ0019-182	Carbon	Low Noise Type 1/4W
R409, R410	QRZ0019-682	Carbon	Low Noise Type 1/4W
R413, R414	QRZ0019-182	Carbon	Low Noise Type 1/4W
R415, R416	QRZ0019-102	Carbon	Low Noise Type 1/4W
R417, R418	QRZ0019-471	Carbon	Low Noise Type 1/4W (A)
R419, R420	QRZ0019-473	Carbon	Low Noise Type 1/4W
R421, R422	QRZ0019-100	Carbon	Low Noise Type 1/4W (A)
R423, R424	QRG011K-392	Oxide Metalized	
R425, R426	QRD126J-152	Carbon	Unflamable Type
R429, R430	QRZ0019-560	Carbon	
R431, R432, R437, R438	QRC121K-220	Composition	
R433, R434, R435, R436	QRC121K-221	Composition	
R439~R442	QRM035KR47	Unflamable	Cement Sealed
R443, R444	QRC121K-100	Composition	
R445, R446	QRC121K-4R7	Composition	
R501, R502	QRZ0019-122	Carbon	Low Noise Type 1/4W (A)
R503, R504, R511	QRZ0019-103	Carbon	Low Noise Type 1/4W (A)
R506, R509	QRZ0019-822	Carbon	Low Noise Type 1/4W (A)
R507	QRZ0019-152	Carbon	Low Noise Type 1/4W (A)
R508	QRZ0019-392	Carbon	Low Noise Type 1/4W (A)
R510	QRZ0019-223	Carbon	Low Noise Type 1/4W (A)
R512	QRZ0019-433	Carbon	Low Noise Type 1/4W (A)
R513	QRZ0019-560	Carbon	Low Noise Type 1/4W (A)
R514	QRZ0019-563	Carbon	Low Noise Type 1/4W (A)
R515	QRG011K-271	Oxide Metalized	

TAC-295 PIN JACK CIRCUIT BOARD ASS'Y



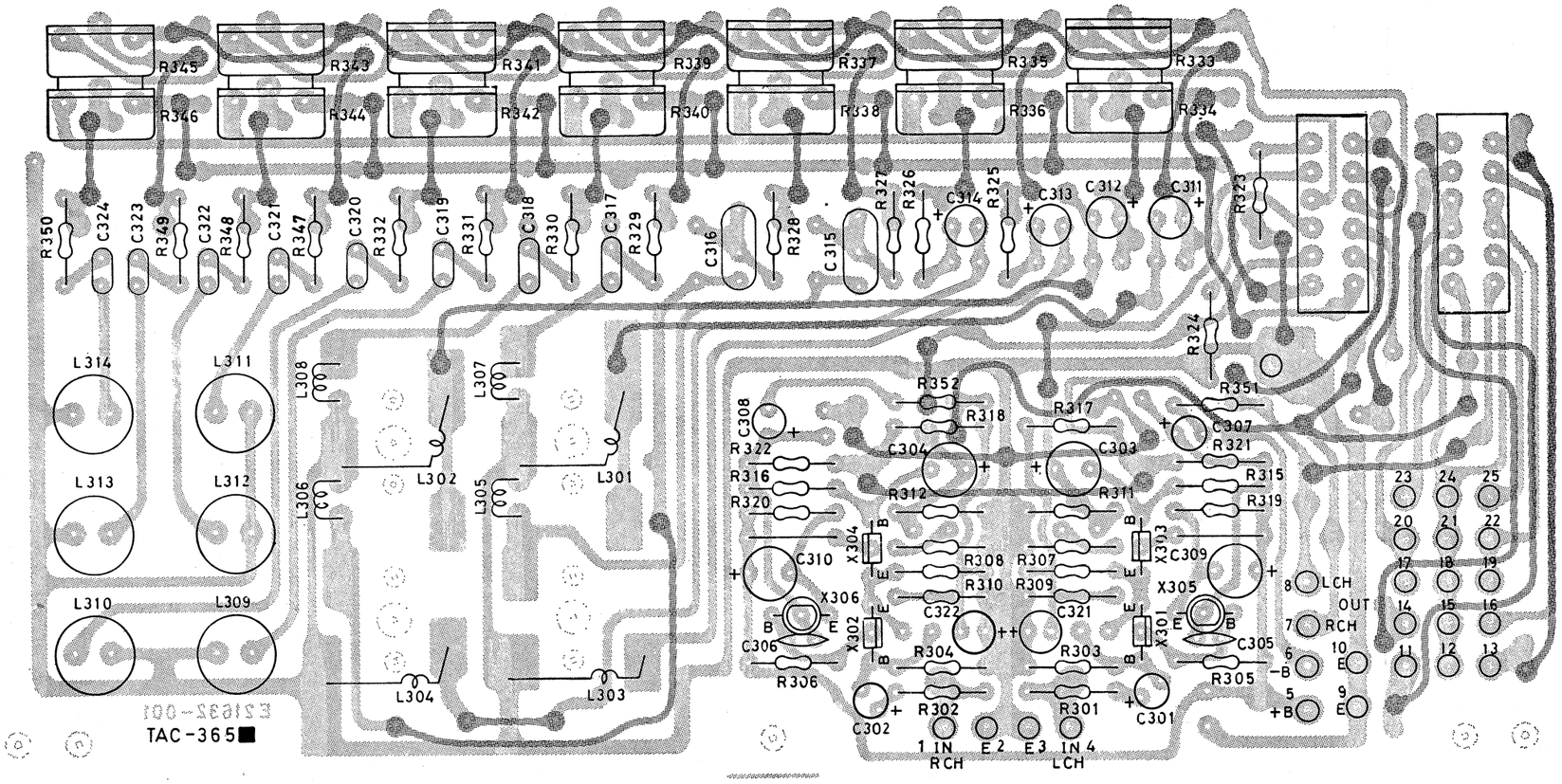
Ref. No.	Parts No.	Parts Name	Description
	E03043-122	Pin Jack Ass'y	12 Pin
	E03043-42	Pin Jack Ass'y	4 Pin
	E03565-9	Pin Socket Ass'y	For interconnection with TAE-104C
	E03565-7	Pin Socket Ass'y	
	E03565-5	Pin Socket Ass'y	

TAC-300B SOCKET CIRCUIT BOARD ASS'Y (BOTTOM VIEW)



Ref. No.	Parts No.	Parts Name	Description
	TAC-300B	Socket C. Board Ass'y	Board with Pin
	E48688-001	Connect Pin	
	E33693-002	Circuit Board	Board only

S.E.A CONTROL AMPLIFIER CIRCUIT BOARD ASS'Y (TOP VIEW)



Transistors

Ref. No.	Parts No.	Parts Name	Description	Pc	fT
X301~X304	2SC1345(D)	Silicon	(HITACHI)	200mW	230MHz

Resistors

Ref. No.	Parts No.	Parts Name	Description
R301~R332	QRZ0019-	Carbon	Low Noide
R351, R352	QRZ0019-	Carbon	Low Noise

Capacitors

Ref. No.	Parts No.	Parts Name	Description
	QEW41EA-	Electrolytic	25V
	QEW41AA-	Electrolytic	10V
	QEB41EM-	Electrolytic	16V Low Leakage
	QEB41EM-	Electrolytic	25V Low Leakage
	QFM41HJ-	Mylar	50V 5%

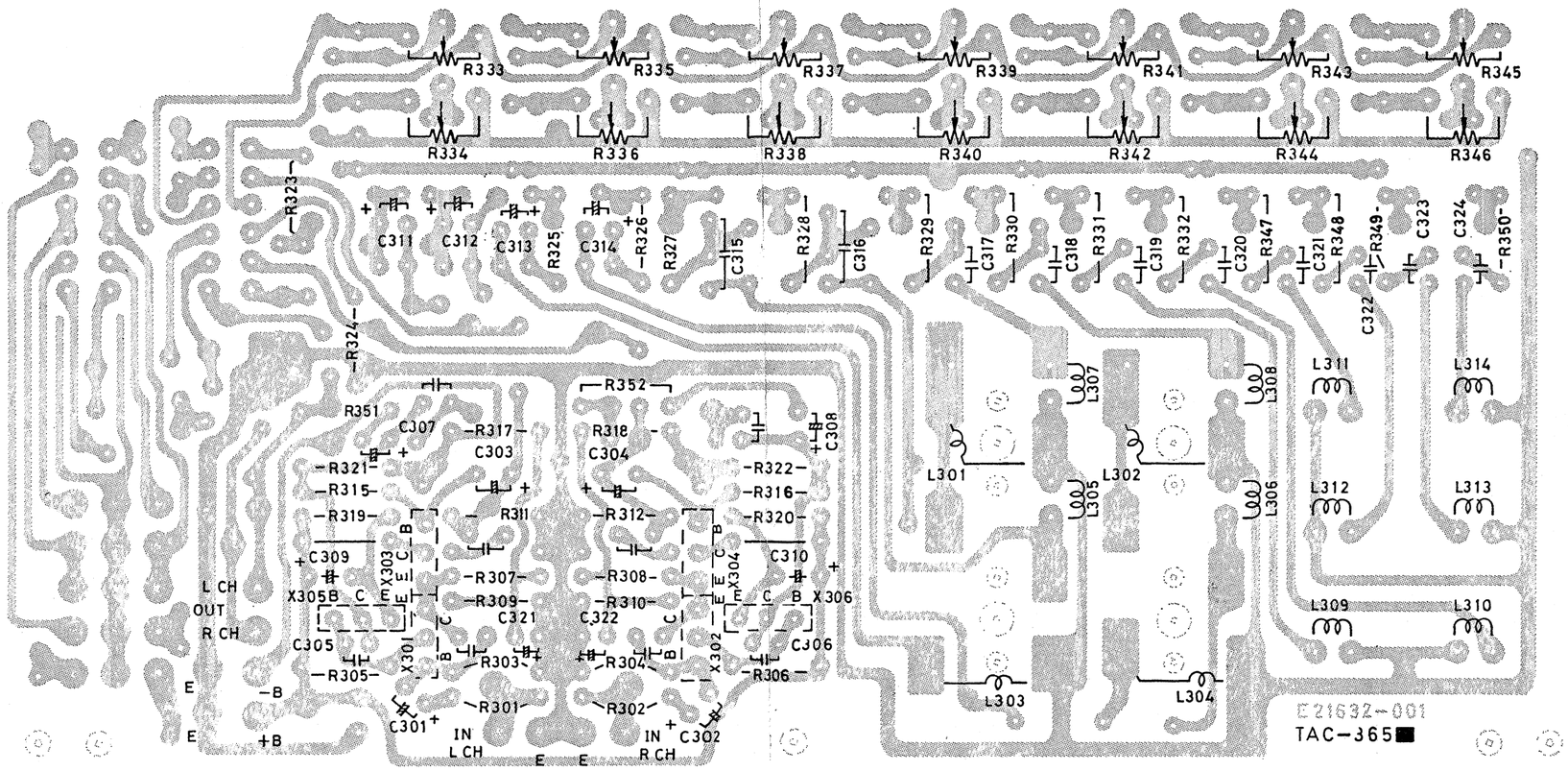
Variable Resistors

Ref. No.	Parts No.	Description	
R333~R342	QVD3A2W-754	50K (W)	

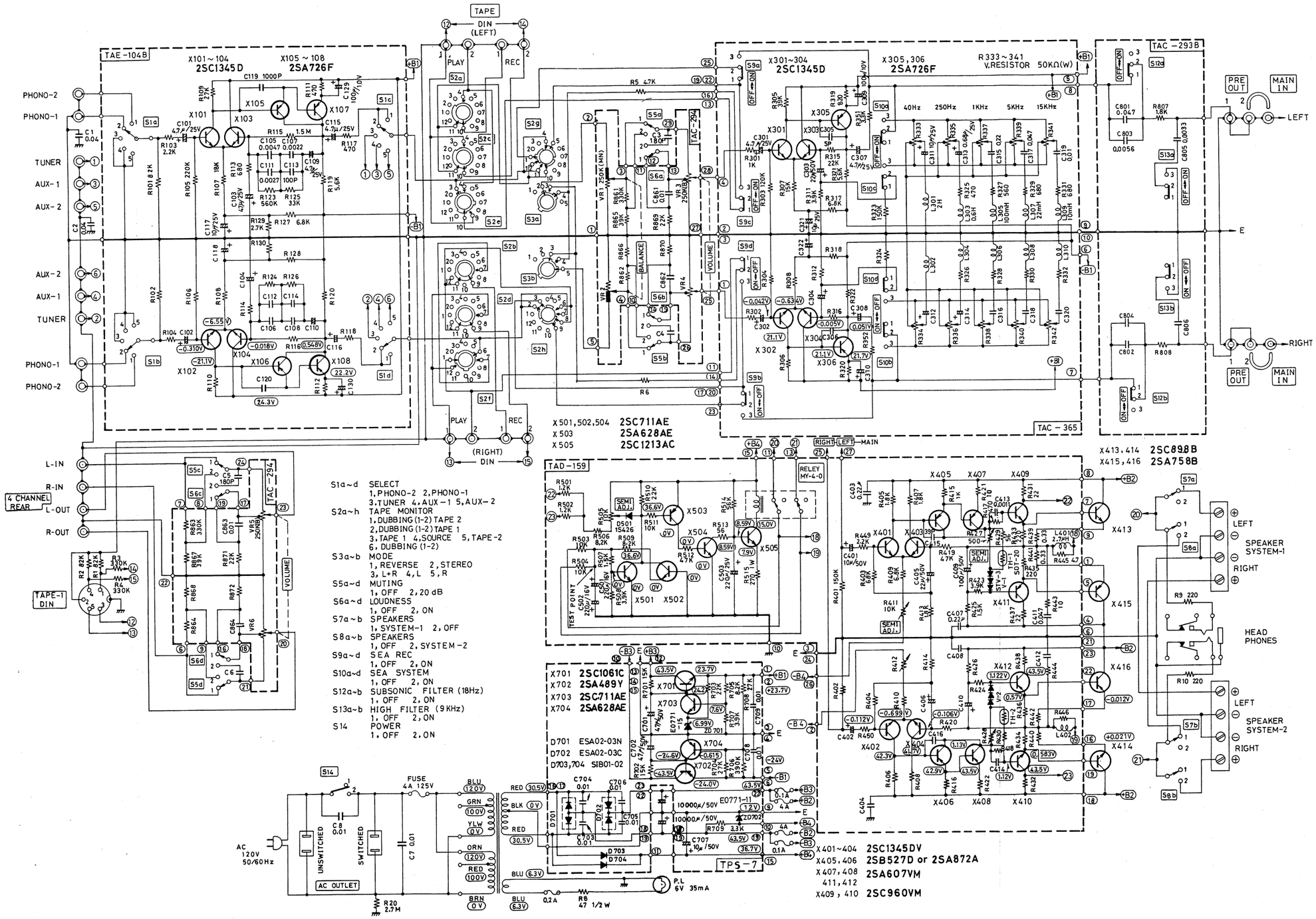
Others

Ref. No.	Parts No.	Parts Name	Description
	E33085-002	S.E.A. C.B. Bracket	
	E49511-001	Push Sw. Bracket	
L301~L304	E03108-19	Choke Coil	2H (40Hz), 0.6H (250Hz)
L305, L306	E0747-11	Ferri Inductor	100mH (1KHz)
L307, L308	E0747-12	Ferri Inductor	22mH (5KHz)
L309, L310	E0747-13	Ferri Inductor	10mH (15KHz)
S9	QSP0220-005	Push Switch	S.E.A., S.E.A. REC.

S.E.A CONTROL AMPLIFIER CIRCUIT BOARD ASS'Y (BOTTOM VIEW)



MODEL JA-S8 SCHEMATIC DIAGRAM



S1a~d SELECT
1, PHONO-2 2, PHONO-1
3, TUNER 4, AUX-1 5, AUX-2

S2a~h TAPE MONITOR
1, DUBBING (1-2) TAPE 2
2, DUBBING (1-2) TAPE 1
3, TAPE 1 4, SOURCE 5, TAPE-2
6, DUBBING (1-2)

S3a~b MODE
1, REVERSE 2, STEREO
3, L+R 4, L 5, R

S5a~d MUTING
1, OFF 2, 20 dB

S6a~d LOUDNESS
1, OFF 2, ON

S7a~b SPEAKERS
1, SYSTEM-1 2, OFF

S8a~b SPEAKERS
1, OFF 2, SYSTEM-2

S9a~d SEA REC
1, OFF 2, ON

S10a~d SEA SYSTEM
1, OFF 2, ON

S12a~b SUBSONIC FILTER (18Hz)
1, OFF 2, ON

S13a~b HIGH FILTER (9KHz)
1, OFF 2, ON

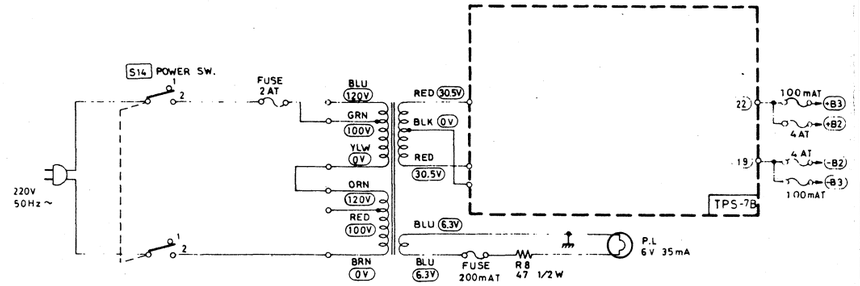
S14 POWER
1, OFF 2, ON

Subject to change without notice

MODEL JA-S8 SCHEMATIC DIAGRAM

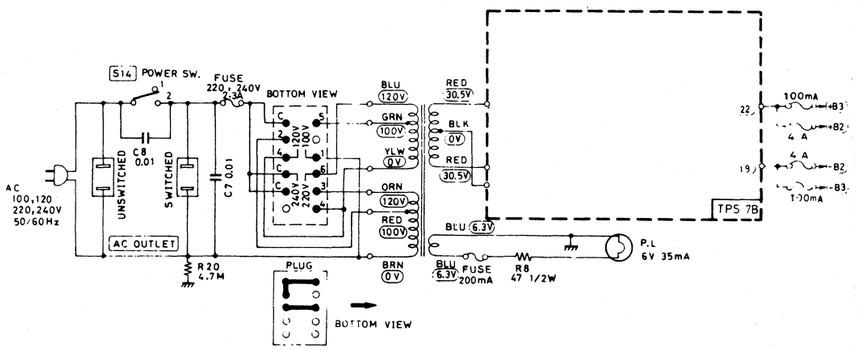
(E) FOR EUROPE

■ PRIMARY CIRCUIT (220V 50Hz~)



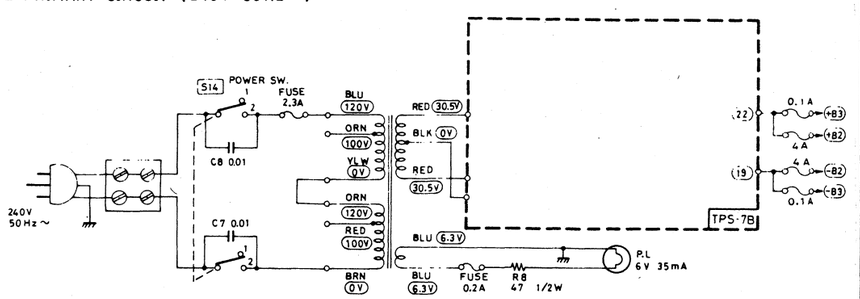
(F) FOR EUROPE

■ PRIMARY CIRCUIT (AC 100, 120, 220, 240V 50/60Hz)



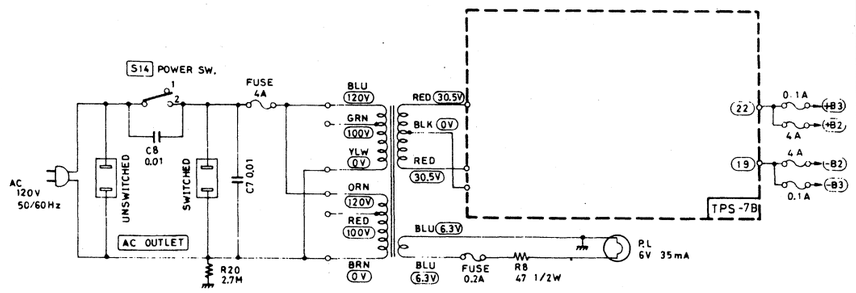
(A) FOR AUSTRALIA AND U.K

■ PRIMARY CIRCUIT (240V 50Hz~)



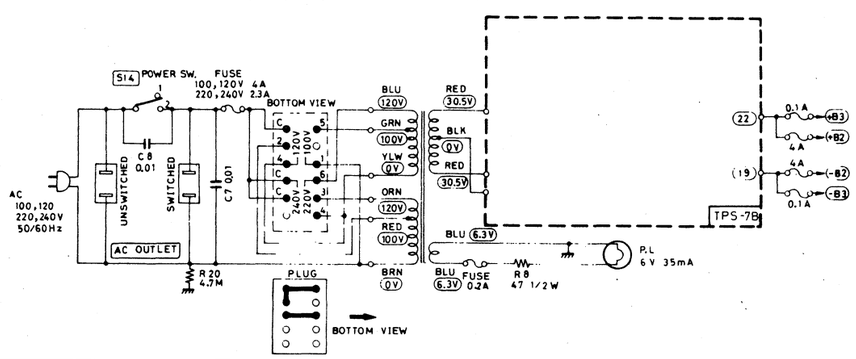
(M) FOR CANADA

■ PRIMARY CIRCUIT (AC 120V 50/60Hz)

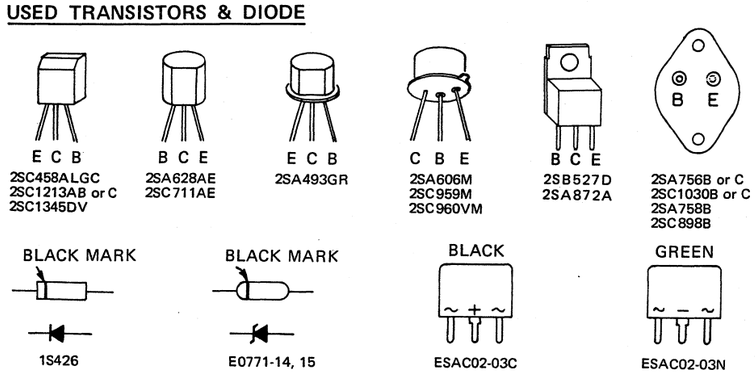


(P) (U) FOR PACEX NEX AND OTHER COUNTRIES

■ PRIMARY CIRCUIT (AC 100, 120, 220, 240V 50/60Hz)



USED TRANSISTORS & DIODE



Subject to change without notice

PARTS LIST WITH SPECIFIED NUMBERS FOR DESIGNATED AREAS

Page	Dwg No.	Original (U.S.A.)	Parts Name	For Canada	For Australia and U.K.	For PACEX NEX and other countries except U.S.A. Canada Europe and Australia	Other areas
8	16	QMF61U1-4R0	Fuse	Not included	QMF60R1-2R3	QMF60R1-4R0	QMF60R1-4R0 QMF60R1-2R3
		BT-20002C	Warranty Card	BT-20008	Not included	BT20014	Not included
		E30580-480A	Instruction Book	Same as original	Same as original	Same as original	E30580-481A E30580-480A
20		QMF61M2-R20 QMF61M2-R10	Fuse Fuse	Same as original	QMF61R1-R20 QMF61R1-R10	Same as original	Same as original
10	9	QSU1222-001	Lever Switch	Same as original	QSY2220-004	QSL1135-007	QSL1135-007
11	10	E31704-001	Cord Stopper		E31704-002	Same as original	Same as original
11	11	QMP1200-244	Power Cord		E03551-002	QMP1200-244 or E03329-001	QMP1200-244 or E03329-001
11	15	QMC0234-001	AC Socket		Not included E48140-002(Plate)	Same as original	Same as original
		Not included	Cover	Not included	Not included	E46603-001	E46603-001
			Voltage Select Socket			QMC9004-001	QMC9004-001
			Voltage Select Plug			QMC9005-001	QMC9005-001
			Plate (to be replaced for AC Socket)			Not included	Not included

List of Accessories and Attachments

Parts No.	Parts Name	Quantity
E64207-002	Envelope	1
E30580-480A	Instruction Book	1
E64103-103	Polishing Cloth	1
QMF61U1-4RO	Fuse (125V 4A) (Refer to back cover about the parts number)	1
E64208-001	Envelope	1
BT-20002C	Warranty Card	1

Comparison Table for Line Voltage, Power Consumption, Primary Fuse by Areas

JA-S8	Line Voltage	Power Consumption
U. S. A.	AC 120V 50/60 Hz	190W
CANADA	AC 120V 50/60 Hz	190W
PACEX/NEX	AC 100V/220V 50/60 Hz	113W
AUSTRALIA	AC 240V/50 Hz	310W
OTHER AREAS	AC 100V/120V/220V/240V 50/60 Hz	310W